

REMARKS

Upon entry of this paper, claims 1, 12, and 24 have been amended, claim 14 has been previously canceled, and no claims have been added as new claims. Thus, claims 1-13 and 15-28 are presently pending in this application. No new matter has been added.

Claim Rejections Under 35 USC § 103

Claims 1-13 and 15-28 were rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Ramaswami et al. Applicant has now amended claims 1, 12, and 24 to more clearly indicate that which Applicant maintains to be the invention. In addition, Applicant provides the following remarks.

The Examiner has indicated that the “combination of admitted prior art and Ramaswami et al. simply provides 1:1 (1:N) protection as the span protection scheme and shadow span of the admitted prior art.” *See* OA, page 3. The Examiner further indicates that “[i]n view of this combination, claim 1 reads on one case of operation: the failure of the working span between switch 54 and amplifier 60 in Fig. 1C.” *See* OA, page 3.

Applicant respectfully submits that claims 1, 12 and 24, as amended, do not read on the described case of operation, nor on any case of operation that could result from the combination of Fig. 1C with Ramaswami. As such, Applicants submit that the prior art, when combined, fails to teach or suggest all the claimed limitations.

Specifically, the scenario put forth in the most recent Office Actions describes a situation where an unrelated protect path can carry a different sub-band of data. The present invention provides a working path and a protect path wherein the same data can be handled by different sub-bands depending on the conditions that arise due to line failure or module failure.

The present claimed invention (according to all independent claims 1, 12, and 24) splits a first sub-band of the optical signal to be carried “only by the working path” and a second sub-band of the optical signal to be carried “only by the protect path” and “configured to protect the

working path”. There is no recognition in either Fig. 1C of the admitted prior art, or in Ramaswami of separation of the optical signal into non-overlapping sub-bands for protection purposes. Furthermore, there is no recognition of then allocating each sub-band to only operate on one of a working path or a protect path, but not on both. This arrangement is claimed in claim 1 as “a first sub-band of the optical signal carried only by the working path . . .” and “a second sub-band of the optical signal carried only by the protect path configured to protect the working path . . .” See claim 1, (see also claim 12 “separating the optical signal into a first sub-band supporting only a working path and a second sub-band supporting only a protect path configured to protect the working path” and claim 24 “amplifying only signals from a first sub-band . . . carried only by a working path; and . . . amplifying only signals from a second sub-band . . . carried only by a protect path configured to protect the working path”).

Applicant respectfully submits that to establish a *prima facie* case of obviousness there must be some suggestion or motivation, either in the prior art or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine multiple reference teachings. There must then be a reasonable expectation of success. Finally, the prior art reference or references (when combined) must teach or suggest all the claimed limitations. Applicant submits that such a case of obviousness cannot result from the applied art.

Accordingly, Applicant respectfully submits that the combination of Fig. 1C with Ramaswami fails to teach or suggest every characteristic of Applicant’s claims 1, 12, or 24, and their corresponding dependent claims. Applicant further submits that all claims of the present invention are not obvious with respect to, and are therefore allowable over, the cited art.

CONCLUSION

In view of the foregoing, it is respectfully submitted that this application is now in condition for allowance. Applicant courteously solicits allowance of the claims in the form of a Notice of Allowance. Should there be any outstanding issues of patentability following the entry of this response, a telephone interview is respectfully requested to resolve such issues.

Applicant previously requested and paid for a two-month extension on July 25, 2005, resulting in a one-month extension enclosed herewith. Please charge our Deposit Account No. 12-0080, under Order No. SYCS-042RCE from which the undersigned is authorized to draw.

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Respectfully submitted,

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